

We Claim:

1 1. A thermometry apparatus comprising:
2 a housing;
3 a probe that includes at least one temperature responsive element;
4 an isolation chamber for receiving said probe, said isolation chamber being
5 removable from said housing; and
6 a first switch assembly for determining whether said isolation chamber is
7 attached to said housing, said first switch assembly enabling said thermometry
8 assembly to operate only if said isolation chamber is attached to said housing.

1 2. An apparatus according to Claim 1, wherein said isolation chamber
2 includes a second switch assembly for determining the presence of a probe in an
3 attached isolation chamber.

1 3. An apparatus according to Claim 2, wherein said first switch
2 assembly and said second switch assembly are interconnected to one another so as
3 to prevent use of said thermometry apparatus until said isolation chamber is
4 attached to said housing and said probe is removed from the isolation chamber.

1 4. An apparatus according to Claim 1, including a shroud assembly into
2 which at least a portion of said isolation chamber is inserted, said shroud assembly
3 being attached to said first switch assembly.

1 5. An apparatus according to Claim 4, wherein said first switch
2 assembly is a mechanical switch that is enabled only when said isolation chamber is
3 inserted into said shroud.

1 6. An apparatus according to Claim 2, wherein said second switch
2 assembly comprises an optical switch.

1 7. An apparatus according to Claim 4, wherein said shroud assembly is
2 attached to a circuit board containing processing circuitry, said first switch
3 assembly also being attached to said circuit board.

1 8. An apparatus according to Claim 1, wherein said isolation chamber
2 provides a fluid tight seal when said isolation chamber is fitted into said housing.

1 9. A method for automatically powering a thermometry apparatus
2 having a probe with at least one temperature sensitive element, said method
3 comprising the steps of:
4 determining whether an isolation chamber is attached to a thermometry
5 apparatus housing;
6 automatically determining whether a probe has been removed from said
7 isolation chamber; and
8 automatically powering said apparatus if said isolation chamber has been
9 determined to be attached to the housing and a probe has been removed from the
10 attached isolation chamber.

1 10. A method according to Claim 9, including the step of automatically
2 deactivating said apparatus if said isolation chamber has been removed from the
3 apparatus and automatically turning off said apparatus if said probe is reinserted
4 into said isolation chamber.

1 11. A method according to Claim 9, wherein said first determining step
2 is performed using a first switch assembly.

1 12. A method according to Claim 9, wherein said second determining
2 step is performed using a second switch assembly.